FOREIGN DIRECT INVESTMENT IN PAKISTAN: POLICY ISSUES AND OPERATIONAL IMPLICATIONS

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Foreword

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Acronyms and Abbreviations

ASEAN — Association of Southeast Asian Nations

BOI — Board of Investment

CIPC — Central Investment Promotion Committee

DMC — Developing Member Country

ECC — Economic Coordination Committee
EDB — Engineering Development Board

EPZ — Export Processing Zone

EU — European Union

FDI — Foreign Direct Investment
GDP — Gross Domestic Product
GOP — Government of Pakistan

IAMC — International Asset Management Company

IFC — International Finance Corporation
 IPB — Investment Promotion Bureau
 IPP — Independent Power Producer
 KEPZ — Karachi Export Processing Zone
 KESC — Karachi Electric Supply Corporation

MBC — Malaysian Business Council

MIGA — Multilateral Investment Guarantee Agency

MNC — Multinational Corporation

NIE — Newly Industrialized Economy

NOC — No Objection Certificate
NPP — National Power Plan

PAEC — Pakistan Atomic Energy Commission

PBC — Pakistan Business Council

PR — Pakistan Rupee

PTC — Pakistan Telecommunications Corporation

PSO — Public Sector Organization
SBP — State Bank of Pakistan
SIZ — Special Industrial Zone
SRO — Special Regulatory Order
T&D — Transmission and Distribution
TNC — Trans-National Corporation

UNCTAD — United Nations Conference on Trade and Development
 USAID — United States Agency for International Development

WAPDA — Water & Power Development Authority

WTO — World Trade Organization

Abstract

Given its fragile balance of payments position and urgent need to boost industrial production, Pakistan needs to significantly increase its mobilization of foreign resources. However, long-term official assistance will become increasingly scarce, while promoting large portfolio investments is not a proper policy option due to Pakistan's underdeveloped and narrow capital market. Significant increases in commercial borrowings are also not desirable. It is therefore crucial to accord high priority to foreign direct investment (FDI).

Previous inflows of FDI in Pakistan were meager, accounting for only 0.2% of the world total and less than one percent of the Asian subtotal each year in the 1990s. Among the major impediments are urban violence, inconsistent economic policies, and government bureaucracy. Remedial policy actions are essential.

Another major problem is the concentration of FDI on the power sector, a domestic-oriented sector, which results in large foreign exchange costs and remittances. This has serious balance of payments implications. Lessons learned from the Pakistan experience are: developing economies should attach short-term priority to attracting FDI to the foreign exchange earning sector, or, at least, both the foreign exchange earning sector and other sectors simultaneously. Multilateral development organizations, including the Asian Development Bank, should also take this into account in their private sector operations, particularly the build-own-transfer type, to develop economic infrastructures in developing economies.

I. Importance of Foreign Direct Investment in Pakistan

The Asian currency crisis that erupted in Thailand in July 1997 and has since spread to other countries, particularly Indonesia, Republic of Korea (Korea), and Malaysia, renewed the significance of prudential management of foreign capital flows in developing countries where domestic financial markets are not yet fully developed. The crisis poses many challenges to developing countries, including how to best supervise financial institutions, how to efficiently manage foreign exchange reserves/systems, and how to prudentially manage foreign debt and investments. From the viewpoint of foreign resource mobilization, the crisis highlights the urgent need to reexamine the optimal combination of foreign capital, i.e., proper composition of concessional public loans, commercial loans, portfolio investment, and foreign direct investment. Volatile movements of portfolio investment triggered the Asian crisis, which was reinforced by panic withdrawals of short-term commercial loans. However, it did not have any relation to foreign direct investment (FDI) due to its high stability. This underscores the importance of FDI in the developing member countries (DMCs), particularly the group of least developed DMCs where domestic financial markets are fragile and liquidity is limited. Pakistan belongs to this group. The size of its financial market is very small and its foreign exchange and debt position is precarious. Over the last two years, foreign exchange reserves in Pakistan have remained at less than \$1.3 billion, which was equivalent to only 4-5 weeks of imports of goods. Short-term debt has also increased from 12% of total debt in the early 1990s to 20% at present.

These developments increase the need for attracting FDI into Pakistan. FDI is a significant long-term commitment and a part of the host economy itself. In the difficult circumstances described above, Pakistan's policy on foreign capital mobilization must attach priority to (i) official multilateral assistance; (ii) official bilateral assistance; and (iii) FDI, given its very limited absorptive capacity for portfolio investment and commercial bank loans. However, concessional long-term development assistance, both multilateral and bilateral, will become increasingly scarce due to domestic financial constraints in major donors, such as Japan, and Pakistan's increased competition with other least developed countries such as Bangladesh, Mongolia, Sri Lanka, and Viet Nam. Multilateral development organizations including the Asian Development Bank will focus on poverty alleviation and soft sectors (i.e., agriculture, rural development, education, environment, poverty, and health), while the hard sectors (manufacturing and large-scale physical infrastructure) are expected to be invested in by the private sector and foreign investors as well as the Government of Pakistan (GOP).

The positive developmental role of FDI in general is well documented (see, for example, Chen 1992). FDI produces a positive effect on economic growth in host countries. One convincing argument for that is that FDI consists of a package of capital, technology management, and market access. FDI tends to be directed at those manufacturing sectors

¹After the imposition of the G-7 economic sanctions in early June 1998 following Pakistan's nuclear testing, foreign exchange reserves fell to \$400-500 million. However, they recovered to the previous level of \$1.2-1.3 billion after the partial waiver of the G-7 sanctions and the resumption of IMF assistance programs in January 1999.

and key infrastructures that enjoy actual and potential comparative advantage. In those sectors with comparative advantage, FDI would create economies of scale and linkage effects and raise productivity. For FDI, repayment is required only if investors make profit and when they make profit, they tend to reinvest their profit rather than remit abroad. Another benefit of FDI is a confidence building effect. While the local economic environment determines the overall degree of investment confidence in a country, inflows of FDI could reinforce the confidence, contributing to the creation of a virtuous cycle that affects not only local and foreign investment but also foreign trade and production. This phenomenon well matches the directions of historical flows of FDI in the Asian and Pacific region. Initially, FDI had surged into the newly industrialized economies (NIEs) (Hong Kong, China; Korea; Singapore; and Taipei, China) and thereafter moved to ASEAN countries. Recently, it has been changing its direction to People's Republic of China (PRC), India, and Viet Nam. This changing stream of FDI flows suggests that the degree of confidence building, inflows of FDI, and the pace of economic growth seem to have a positive interrelation in the Asian and Pacific region.

The inflow of FDI into Pakistan is small and concentrated only on a few areas, mostly in the power sector. In 1997 Pakistan accounted for 0.2% of world FDI, less than one percent of developing country and Asian country FDI, and 18% of South Asian countries' FDI.² In spite of liberalizing its formerly inward-looking FDI regime, tempering or removal of obstacles to foreign investors, and according various incentives, Pakistan's performance in attracting FDI has been lackluster. Why could Pakistan not succeed in attracting sufficiently large FDI despite liberalizing its payments and exchange regime as well as inward FDI regime? The present study attempts to find out the answer. Rather, a relatively large inflow of FDI into the power sector since 1995 has created some adverse effects, most important of which was the large increase in imports of capital goods for construction of power plants, and the ongoing conflict between the government and foreign independent power producers (IPPs) on the power rate the government needs to pay to IPPs under the purchase contract. Another negative effect of FDI concentration on the power sector was that as the remittances by IPPs began to increase, it severely constrained the balance of payments, given that foreign exchange earnings through exports of goods and services remain low.³ From this undesirable pattern of FDI in Pakistan, very important lessons could be drawn for developing economies: they should be careful in allowing a large amount of FDI to nonforeign-exchangeearning sectors during a short period of time; and FDI should be promoted in the foreignexchange-earning sector at the initial stage and to the domestic-oriented sector at the subsequent stages, or, at least, to both sectors simultaneously.

II. Review of FDI Policy

A. Introduction

Policies of host countries have an important influence on foreign investment decisions. Host countries can adopt policies of stimulating foreign investment or they can restrict foreign participation in their economies in various ways. Host country policies and policy

²See Appendix table.

³Exports of services here imply mostly overseas workers. Annual remittances of overseas workers inclusive of their foreign currency deposits amount to about \$3 billion.

pronouncements affect the perception of "political risk" by transnational corporations (TNCs) and thereby the amount of investment of these companies. In addition, host country policies can be instrumental in channeling investment flows toward sectors considered to be of particular importance to the country's development.⁴

Pakistan was basically an agricultural economy upon its independence in 1947. Its industrial capacity was negligible for processing locally produced agricultural raw material. This made it imperative for succeeding governments to improve the country's manufacturing capacity. In order to achieve this objective, however, changing types of industrial policies have been implemented in different times with a changing focus on either the private sector or the public sector. During the 1960s, government policies were aimed at encouraging the private sector while during the 1970s, the public sector was given the dominant role. In the 1980s and 1990s, the private sector was again assigned a leading role. Especially during the decade of the 1990s, Pakistan adopted liberal, market-oriented policies and declared the private sector the engine of economic growth. Moreover, Pakistan has also offered an attractive package of incentives to foreign investors.

B. A Brief Review of the 1950s, 1960s, and 1970s

The private sector was the main vehicle for industrial investment during the 1950s and the 1960s and the involvement of the public sector was restricted to three out of 27 basic industries.⁵ It was also set that in the event of private capital not forthcoming for the development of any particular industry of national importance, the public sector might set up a limited number of standard units. By the late 1960s the economy was largely dominated by the private sector in important areas like banking, insurance, certain basic industries, and international trade in major commodities.⁶ The services sector was reserved for local investors. Foreign investment was not allowed in the field of banking, insurance, and commerce.

On 1 January 1972, the GOP issued an Economic Reforms Order taking over the management of ten major categories of industries, commercial banks, development financial institutions, and insurance companies. In 1975 there was another round of nationalization of small-sized agroprocessing units. The sudden shift toward nationalization of private sector industrial units shattered private investors' confidence. At the same time there was also acceleration in the direct investment by the public sector in new industries ranging from the basic manufacture of steel to the production of garments and breads. The status of the public sector as a catalyst and gap filler in the 1950s and 1960s changed to that of repository of the "commanding heights" of the economy (see Government of Pakistan 1984). All foreign investment was, however, exempted from the purview of the nationalization.

⁴For a detailed discussion on this issue, see ESCAP (1995).

⁵The three basis industries were (i) generation of hydroelectric power; (ii) arms and ammunition; and (iii) manufacturing of railway wagons, telephones, telegraph lines, and wireless apparatus.

⁶For a detailed discussion on the early period's industrialization, see Naseem (1981).

⁷The 10 major categories of industries include: iron and steel, heavy engineering, assembly and manufacturing of motor vehicles, assembly and manufacturing of tractors, heavy basic chemicals, petrochemicals, cement, public utilities, gas, and oil refineries.

C. The 1980s

After the dismal performance of the industrial sector following the 1972 nationalization, a change occurred in September 1978 in the government's approach toward the role of the public and private sectors. The role of the public sector was restricted to consolidating existing enterprises, and further investment in this sector was strictly restricted. The role of the public sector was elaborated in the industrial policy statement enunciated in June 1984. The statement reiterated that the government would continue to pursue a pattern of a mixed economy, with the private and public sector reinforcing each other. At the same time it admitted that the public sector had established its managerial and entrepreneurial foundations and was in a position to chart its future course to create a supportive relationship between the public and private sectors. Industries like steel, fertilizer, cement, petroleum refining and petrochemicals, and automotive equipment engineering were still in the realm of the public sector. The private sector was, however, permitted to participate in these fields as these were not an exclusive preserve of the public sector anymore.

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The industrial policy statement of 1984 not only accorded equal importance to the public and private sectors but also encouraged the private sector to come forward. However, the process of privatization was not initiated. Had this been initiated, Pakistan might have attracted a considerable amount of foreign direct investment in subsequent periods. The public sector retained its role in major industrial areas, which obviously discouraged the inflows of FDI. 9

The procedure for obtaining permission to set up an industry was somewhat restrictive. The government sanction for some categories of investment was considered essential to ensure that the major projects of national significance or in need of government's pricing policy and other support measures were established with government knowledge and involvement. The government's sanction was required for setting up projects in the following categories:

- (i) industries specified for reasons of overcapacity; price regulation; and implementation of a program of assembly-cum-manufacture, requiring indigenous manufacture of components or projects of major national importance or for religion, security, or socioeconomic objectives
- (ii) projects involving foreign private investment
- (iii) large projects costing PRs 300 million and above

⁸It was an ideal time to initiate privatization to attract FDI because economic fundamentals were strong. For example, during the first half of the 1980s real GDP grew at an average rate of 6.7% per annum, manufacturing by 9.5%, investment and saving rates averaged 17.2% and 14.0% respectively, rate of inflation averaged 7.8%, budget deficit as percentage of GDP averaged 6.3%, while current account deficit as percentage of GDP averaged 3.8 percent. Besides strong economic fundamentals, there was no serious law and order problem in the major growth poles of the country. Above all, notwithstanding military dictatorship, there was political stability in the country.

⁹FDI through privatization accounted for 14% and 67% of total FDI inflows into Latin America and the Caribbean and Central and Eastern Europe, respectively. For a detailed discussion on this, see UNCTAD (1994).

- (iv) projects requiring cash foreign exchange of more than PRs 50 million equivalent for plant and machinery
- (v) projects involving the import of secondhand machinery
- (vi) projects in which more than 60% of the raw material was importable, provided the value of each import exceeded 20% of the total investment in fixed assets

The industries included in the above categories required the clearance of the Central Investment Promotion Committee (CIPC) and the approval of the Federal Government. The above-mentioned restrictions and the need to obtain permission for setting up an industry in these areas were applicable to both local and foreign investors. In addition to this, all project proposals involving foreign investment required government approval and were required to be filed in the first instance with the Investment Promotion Bureau (IPB). Foreign private investment was encouraged in the form of joint equity participation with local investors and in the areas where advanced technology, managerial and technical skills, and marketing expertise were involved. Adequate legal framework for foreign investment was provided through the Foreign Private Investment (Promotion and Protection) Act 1976. This Act provided for security against expropriation and adequate compensation for acquisition. The Act also guaranteed the remittance of profit and capital, remittance of appreciation of capital investment, and relief from double taxation for countries with which Pakistan had agreement on avoidance of double taxation. Foreign investment was also encouraged in industrial projects involving advanced technology and heavy capital outlay like engineering, basic chemicals, petrochemicals, electronics, and other capital goods industries.

In order to encourage foreign direct investment in export-oriented industries, an Export Processing Zone (EPZ) was set up in Karachi. Apart from foreign investors, overseas Pakistanis were also encouraged to invest in industrial projects in the EPZ on a nonrepatriable investment basis. The concessions and facilities offered by the EPZ included duty-free imports and exports of goods and tax exemptions. Overseas Pakistanis were exempted from disclosing the origin of the funds for investment and were allowed to bring secondhand machinery without any surveyor certificate.

Despite these incentives, the highly regulated nature of Pakistan's economy proved a deterrent to the inflows of FDI. Specifically, FDI was discouraged by: (i) significant public ownership, strict industrial licensing, and price controls by the GOP; (ii) the inefficient financial sector with mostly public ownership, directed credits, and segmented markets; and (iii) a noncompetitive and distorting trade regime with import licensing, bans, and high tariffs.

Pakistan began to implement a more liberal foreign investment policy as part of its overall economic reform program toward the end of the 1980s. Accordingly, a new industrial policy package was introduced in 1989 based on the recognition of the primacy of the private sector. A number of policy and regulatory measures were taken to improve the business environment in general and attract FDI in particular. A Board of Investment (BOI), attached to the Prime Minister's Secretariat, was set up to help generate opportunities for FDI and provide investment services. A "one-window facility" was established to overcome difficulties in setting up new industries.

D. The 1990s

The basic rules on foreign investment as stated above were laid down in the Foreign Private Investment (Promotion and Protection) Act 1976. Originally, each foreign investment was subject to separate authorization, but this requirement was eliminated in May 1991. In general, no special registration was required for FDI, and the same rules and regulations were applied to FDI as to domestic investors. The requirement for government approval of foreign investment was removed with the exception of a few industries such as arms and ammunition, security printing, currency and mint, high explosives, radioactive substances, and alcoholic beverages (in fact, these industries were also closed to domestic private investors). In all industrial sectors other than those indicated above, not only foreign equity participation of up to 100% was allowed but also, foreign investors can purchase equity in existing industrial companies on a repatriable basis. In nonindustrial sectors, foreign investment was excluded from agricultural land; forestry; irrigation; and real estate including land, housing, and commercial activities. In the state of the province of the provi

All investors, whether domestic or foreign, were required to obtain a No Objection Certificate (NOC) from the relevant provincial government for location of their projects. Thus, the physical location of the investment was effectively controlled by the provincial governments, which was considered a major bottleneck in speedy industrialization. At present, an NOC is only required for foreign investment in areas that are in the negative list of the relevant provincial government. There are only a small number of areas that are on the negative list of the provincial governments.

In the past, investors (domestic and foreign) were not free to negotiate the terms and conditions of payment of royalty and technical fees suited to the requirements of foreign collaborators for technology transfer. The government, therefore, streamlined the procedures and investors are now free to negotiate the terms of conditions suited to them as well as acceptable to multinationals wishing to transfer the requisite technology.

One of the most important measures taken recently by the government affecting FDI has been the liberalization of the foreign exchange regime. Residents and nonresident Pakistanis and foreigners are now allowed to bring in, possess, and take out foreign currency, and to open accounts and hold certificates on foreign currency. Foreigners using foreign exchange have now access to the capital market. For example, no permission is required to issue shares of Pakistani companies to foreign investors, unless they belong to industries included in the Specified List. To further liberalize the foreign exchange regime, the Pakistani rupee has been made convertible effective 1 July 1994. The ceiling earlier imposed on contracting foreign loans has been abolished. Permission of the Federal Government or the SBP would not be required regarding interest rate or payment period of foreign loans not guaranteed by the Government of Pakistan. Foreign currency account holders are now also allowed to obtain rupee loans collateralized against the foreign currency account balance.

The government has also enacted an extensive set of investment incentives including credit facilities, fiscal incentives, and visa policy. Foreign-controlled manufacturing companies exporting 50% or more of their production can now borrow working capital without any limit. Other foreign-controlled manufacturing companies including those not exporting and selling in the domestic market can borrow rupee loans equal to their equity without prior

 $^{^{10}}$ FDI in nonindustrial sectors is not necessarily subject to the same treatment as domestic investment (see UNCTAD 1994).

permission of the SBP. Prior permission of SBP is also not required for raising domestic credit to meet fixed investment requirement.

A number of fiscal incentives include a three-year tax holiday to all industries throughout Pakistan set up between 1 December 1990 and 30 June 1995. Investments in delineated rural areas, industrial zones, and less developed areas enjoy five and eight years tax holiday respectively, together with special custom duty and sales tax concessions. The import policy has also been liberalized considerably, and the maximum tariff rate has been reduced from 225% in 1986/1987 to 45% in 1996/1997. A large number of quantitative restrictions and nontariff barriers have been removed, and the negative and prohibited lists of imports have also been reduced (see BOI 1995b). Export incentives have also been broadened. The highly cumbersome duty-drawback system is being replaced with a scheme whereby 80% of the duty-drawback is paid automatically within three days to the firm, and the remaining 20% is paid within one week after inquiry.

The visa policy of Pakistan has been modified to make it attractive to foreign investors. Foreign investors with substantial investment are granted 3 years multiple entry visa. There is no restriction/requirement for work permit for foreign managerial and technical personnel for gainful employment/occupation in private firms in Pakistan.

Special industrial zones (SIZs) have been set up to attract foreign investment in export-oriented industries. Apart from foreign investors, Pakistanis working abroad are also eligible to invest in SIZs. The government is responsible for providing the necessary infrastructure and utility services in the SIZs. Investment in SIZs are exempted from existing labor laws of the country. Hefty fiscal incentives are given to foreign investors in the SIZs, which include income tax holiday for a period of 10 years provided the plant commences commercial operation as of 30 June 1999; duty-free imports of plant and machinery not manufactured locally; and tax exemption on capital gains, to the extent of the foreign equity share, for a period of five years from the inception of the venture.¹²

Foreign investment in Pakistan is protected through the Constitution (Article 24) as well as through specific laws. Section 8 of the Protection of Economic Reforms Act 1992 provides legal cover to foreign investment in Pakistan.

Beside these statutory protections, the Multilateral Investment Guarantee Agency (MIGA) provides a means of obtaining insurance cover against noncommercial risks. Pakistan is a top beneficiary of the MIGA investment cover. MIGA has provided Pakistan with 9.4% of its investment insurance facilities, the highest among other developing countries.

In November 1997, the government issued the New Investment Policy which includes major policy initiatives. In the past, foreign investment was restricted to the manufacturing sector. Now foreign investment is allowed in sectors like agriculture and services, which constitute above three fourths of gross national product. The main objective of the new policy is to enhance the level of foreign investment in the fields of industrial base expansion, infrastructure and software development, electronics, engineering, agro-food, value-added textile, tourism, and construction industries. Foreign investment on a repatriable basis is now also allowed in agriculture, services, infrastructure, and social sectors, subject to these conditions: (i) the basis is joint venture (60:40); (ii) foreign equity will be at least \$1 million; (iii) foreign companies registered in Pakistan will be allowed to invest; and (iv) for social sector and infrastructure projects, joint venture is waived (100% foreign equity may be allowed).

¹¹For a detailed discussion on Pakistan's trade and tariff policy, see M.Z. Khan (1996).

¹²For further details on incentives and concessions in the SIZs, see BOI (1995a).

The manufacturing sector has also been prioritized into four categories: (i) value-added or export industries; (ii) hi-tech industries; (iii) priority industries; and (iv) agro-based industries. The tariff on imported plant, machinery, and equipment (PME) that are not manufactured locally for categories (i), (ii), and agriculture is zero while that for categories (iii), (iv), and social services will be charged 10%. First year allowance of cost of PME would be available at 90% for (i) and (ii), at 75% for categories (iii) and (iv), and at 50% for other industries. Reinvestment allowance for expansion would be allowed at 50% of cost of PME.

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Notwithstanding significant deregulation and various incentives/concessions given to foreign investors, Pakistan still faces serious problems as far as implementation of foreign investment policies are concerned. There is a strong perception among foreign investors that the probusiness policies and inducement used to attract prospective new investors are somehow weak given realities when they actually begin to set up and operate their business in Pakistan.

III. Trends, Issues, Foreign Direct Investment, and Economic Impact of FDI

A. Trends

The success of FDI policies can be judged by the size of the inflows of capital. Pakistan has been making efforts to attract FDI and such efforts have been intensified with the advent of deregulation, privatization, and liberalization policies initiated at the end of the 1980s. Table 1 documents the size of the inflow of foreign investment in Pakistan during the last two decades. The amount of foreign investment rose from a tiny \$10.7 million in 1976/1977 to \$1296 million in 1995/1996, thus growing at the annual compound growth rate of 25.7 percent. However, it declined to \$950 million in 1996/1997. With the beginning of the overall liberalization program (1991/1992 onwards) the inflow of foreign investment grew at the compound growth rate of 15.2 percent. Investment inflows in 1995/1996 increased by 93.3% mainly due to the inflow of investment in power sector.

Although significant by absolute terms, the increase appears trivial when compared to the relatively more buoyant economies of East and Southeast Asia. While FDI flows to all developing countries reached \$150 billion in 1997, East and Southeast Asia received the bulk of this share.

Total foreign investment consists of direct and portfolio investment. Prior to 1991/1992, portfolio investment has not only been low but also exhibited a fluctuating trend. However, with the beginning of liberalization policies in 1991/1992, portfolio investment crossed the \$1.0 billion mark in 1994/1995. This impressive increase does not reflect the true picture of the trends in portfolio investment witnessed during the postliberalization period. If the \$862.2 million sale of Pakistan Telecommunications Corporation (PTC) vouchers, which was a one-time phenomenon, was excluded, the portfolio investment not only declined to \$227.8 million in 1994/1995 but followed an average trend of \$215.4 million during 1991/1992 to 1995/1996 as against an average flows of only \$9.0 million prior to reform (1984/1985 to 1990/1991). 13

 $^{^{13}}$ The State Bank of Pakistan publishes direct and portfolio investment separately from 1984/1985 onwards.

TABLE 1
Inflow of Foreign Investment in Pakistan
(million \$)

				Percen	t of Total
Year	Direct	Portfolio	Total	Direct	Portfolio
1976/77	_	_	10.7	_	_
1977/78	_	_	35.5	_	_
1978/79	_	_	36.0	_	_
1979/80	_	_	28.2	_	_
1980/81	_	_	35.0	_	_
1981/82	_	_	98.0	_	_
1982/83	_	_	42.1	_	_
1983/84	_	_	48.0	_	_
1984/85	70.3	23.4	93.7	75.0	25.0
1985/86	145.2	16.0	161.2	90.0	10.0
1986/87	108.0	21.0	129.0	83.7	16.3
1987/88	162.2	10.5	172.7	93.9	6.1
1988/89	210.2	7.2	217.4	96.7	3.3
1989/90	216.2	-4.7	211.5	102.2	-2.2
1990/91	246.0	-9.0	237.0	103.8	-3.8
1991/92	335.1	218.5	553.6	60.5	39.5
1992/93	306.4	136.8	443.2	69.1	30.9
1993/94	354.1	288.6	642.7	55.1	44.9
1994/95	442.4	1089.9	1532.3	28.9	71.1
(1994/95*)	(442.4)	(227.8)	(670.2)	(66.0)	(34.0)
1995/96	1090.7	205.2	1295.9	84.2	15.8
1996/97	682.1	267.4	949.5	71.8	28.2

Source: State Bank of Pakistan.

Notes:Direct investment consists of cash, capital equipment brought-in and reinvested earnings.

Foreign participation appears to be the major factor responsible for the increase in portfolio investment in the 1990s. The decline in international interest rates was also important in portfolio allocations toward Pakistani assets. With globalization, numerous international portfolio funds were created that were invested in emerging capital markets seeking for better returns. Pakistan was among the first countries in emerging markets to take measures to open up its stock markets to foreign investors. However, in relation to the total flows directed to developing countries, interest in Pakistan has been very modest (Khan 1996). Portfolio inflows, because of their inherently volatile nature, have proved to be reversible more than other forms in developing countries. Their potential volatility is great in Pakistan as well since portfolio investment in Pakistan is directed mainly toward short-term and some medium-term public debt instruments and the stock exchanges.

^{* =} Excluding 862.2 million of PTC Vouchers

The major component of the total foreign investment is FDI. As can be seen from Table 1, despite yearly fluctuations, the amount of FDI rose from \$70.3 million in 1984/1985 to \$1090.7 million in 1995/1996, thus growing at the compound growth rate of 25.7 percent. However, it decreased to \$682 million in 1996/1997. Since the beginning of the liberalization program (1991/1992), FDI has grown faster than in the preliberalization period (1984/1985-1990/1991). In particular, 1995/1996 registered a phenomenal growth of 146.5% mainly due to the inflow of FDI in the power sector. FDI, on average, accounted for nearly 80-85% of total inflows over the period 1984/1985 to 1996/1997.

Table 2 reports the inflow of FDI by origin since 1981/1982. The US and UK have been the major sources of FDI in Pakistan, although the shares of both US and UK have fluctuated widely, falling as low as 8.8% for the US and 4.7% for the UK and rising as high as 63.7% and 35.2%, respectively. The share of the US has been, by far, the largest of all the countries, averaging 32.4% over the last 16 years followed by the UK (12.9%), UAE (11.6%), Japan (5.7%), and Germany (5.4%). During the post-reform era, the share of the US further rose to 42.0% followed by the UK (12.3%), Japan (6.4%), Germany (5.4%), and the UAE (4.7%). It may be noted that Japan, which has emerged as a major investor globally (averaging \$27.9 billion during 1990-1997), has annually invested only \$32.3 million (or 0.1%) in Pakistan during the same period. 14

TABLE 2
Shares of Inflow of FDI from Various Countries (percent)

Year	USA	UK	UAE	Germany	France	Hong Kong, China	Italy	Japan	Saudi Arabia	Canada	Netherlands	Others
1981/82	15.5	19.9	8.4	3.6	0.19	0.15	0.02	0.43	0.23	0.30	1.52	49.8
1982/83	11.6	16.9	10.0	3.3	0.23	0.06	0.01	0.50	2.6	0.23	3.34	51.3
1983/84	8.8	16.3	8.2	4.8	0.10	0.51		0.45	2.5	$0.21 \\ 0.43$	1.35	56.8
1984/85	24.5	12.7	16.9	9.1	1.71	0.85	0.14	9.53	5.4		9.71	9.1
1985/86	24.2	8.6	47.9	2.9	0.55	1.9	0.27	4.33	-5.0	0.74	0.89	13.5
1986/87	39.7	4.7	23.7	5.0	1.39	6.20	0.37	8.7	0.92		0.55	8.0
1987/88 1988/89	28.2 45.1	15.7 10.8	15.0 6.2	11.3 4.8	308 3.68	3.39 3.01	$0.67 \\ 0.57$	8.38 8.0	$0.55 \\ 0.24$	$0.62 \\ 0.43$	0.25 0.81	12.8 16.3
1989/90	43.4	10.5	7.3	5.2	2.77	0.42	1.75	7.45	$0.51 \\ 0.36$	0.42	2.45	17.8
1990/91	52.8	13.7	3.7	5.1	2.88	1.34	1.18	10.65		0.77	0.93	6.6
1991/92 1992/93	63.7 44.7	6.1 8.4	3.1 3.1	6.4 11.8	2.53 1.98	4.05	$0.59 \\ 0.19$	5.28 7.18	0.03 2.67	0.90 0.09	0.24 1.83	11.1 14.1
1993/94 1994/95	32.2 39.9	9.0 8.7	2.1 10.6	2.6 4.0	3.13 3.05	0.34 0.49	$0.08 \\ 0.06$	8.38 3.68	$0.54 \\ 0.20$	$0.34 \\ 0.09$	-0.03 1.02	41.3 28.2
1995/96	29.3	29.1	4.8	2.4	1.28	3.11	0.04	7.52	2.46	0.07	1.09	18.8
1996/97	36.1	35.2	8.0	2.6	1.5	1.1	0.26	5.37	-2.49	0.25	0.1	11.0

Source: State Bank of Pakistan.

 $^{^{14}}$ The cautious investment attitude of Japanese businessmen toward Pakistan is well documented in Shirouzu (1993). This will be discussed in Section IIID.

B. Structural Pattern of FDI

FDI in Pakistan consists primarily of three elements, namely, cash brought in, capital equipment brought in, and re-invested earnings. The information provided in Table 3 shows that the structure of the sources of financing FDI in Pakistan has undergone a noticeable change. Though all the components of FDI exhibit considerable fluctuations over time, the item labeled capital equipment brought in has remained substantially low during 1983-1988. Though the major share of FDI in Pakistan comprised cash brought in (on average 55.7% over the last 15 years), its share declined slightly (on average 50.2% during 1991-1994) during the post-reform period. The share of capital equipment brought in remained low, on average, over the last 15 years but it has made considerable improvement during the postreform period. In particular, its share jumped to 55.7% in 1994 mainly due to the equipment brought in for Hubco Power Plant. Re-invested earnings contributed slightly less than one third to FDI over the last 15 years but its share has declined to 23% during the postreform period.

TABLE 3
Inflow of FDI by Type
(million PRs)

					Per	cent of Total A	Assets
Years	Total Assets	Cash Brought In	Capital Equipment Brought In	Re-Invested Earnings	Cash Brought In	Capital Equipment Brought In	Reinvested Earnings
1980	293.3	126.1	90.8	76.4	42.9	31.0	26.1
1981	432.8	247.7	83.7	101.4	57.2	19.2	23.4
1982	458.3	206.5	105.9	145.9	45.0	23.1	31.8
1983	534.7	391.9	15.3	127.5	73.3	2.9	23.8
1984	511.0	273.9	9.6	227.5	53.6	1.9	44.5
1985	752.1	489.9	10.9	251.3	65.1	1.4	33.4
1986	1528.3	1133.6	19.3	375.4	74.2	1.3	24.5
1987	1905.9	912.4	18.9	974.6	47.9	1.0	51.1
1988	2396.0	1344.9	315.0	736.1	56.1	0.8	40.7
1989	3768.9	1988.4	607.1	1173.4	52.7	16.1	31.1
1990	6013.4	4014.5	490.5	1508.1	66.7	8.1	25.1
1991	6441.4	4093.8	382.0	1965.6	63.5	5.9	30.5
1992	9001.5	3642.1	2975.6	2383.8	40.4	33.0	26.5
1993	11170.4	7225.8	1292.6	2652.0	64.7	11.6	23.7
1994	24013.8	7778.31	13371.8	2863.7	32.4	55.7	11.9
Averag	ge						
1980-9	•				55.7	14.2	30.1
1991-9	4				50.2	26.5	23.3

Source: State Bank of Pakistan, Foreign Liabilities and Assets and Foreign Investment in Pakistan (various issues).

On average, during 1980-1994, 30% of FDI in Pakistan originated from re-invested earnings, whereas 70% (55.7% as cash and 14.2% as capital equipment) came from abroad. During the postreform a structural shift appears to have taken place as the share of re-invested earnings in total FDI declined to 23% while those coming from abroad rose to 77 percent. It is important to note that the share of re-invested earnings in FDI has been declining since 1990, falling from 31% in 1989 to 12% in 1994. There appears to be two reasons for such a rapid decline. Firstly, as a result of chronic inflation, the cost of production has gone up considerably and along with the plethora of taxes due to the fiscal consideration, the after tax profit of foreign firms has declined. Consequently, the reinvested earnings that originate as savings from the investment previously made have slowed down. Secondly, as a result of liberalization, the entry barriers of foreign firms were removed, which led to higher inflows of new investment. Consequently, the relative share of re-invested earnings in total FDI declined considerably after 1990.

C. Sectoral Distribution of FDI

Having examined the trends and structural pattern of FDI, it is worthwhile to review its overall sectoral distribution pattern. The analysis of sectoral distribution of FDI may reflect two things: on the one hand, it may reflect the preferential treatment given by the government to certain sectors while encouraging FDI, and on the other hand, it may also indicate the foreign investors' own preferences.

As revealed by the information presented in Tables 4 and 5, a noteworthy change can be easily observed in the sectoral composition of FDI flow into Pakistan over the last 15 years. On the broad sectoral basis, manufacturing industries, mining and quarrying, and commerce are seen to have traditionally dominated the preferences of the foreign investors during 1980-1994 accounting for over 83% of total inflow of FDI. However, like total FDI flows, sectoral shares also exhibit considerable year-to-year fluctuations. For example, the sectoral share of manufacturing industries, though highest, continued to fluctuate violently overtime, falling from 74.6% in 1982 to 26.0% in 1983 and once again rising to 54.7% in 1984. The share of manufacturing industries in overall FDI averaged only 11% during 1987-1993 but rose to 35% in 1994. The general decline in manufacturing share is largely substituted by the rise in the share of mining and quarrying, which stood next to manufacturing (28.1%) over the last 15 years. It appears that foreign investors preferred the petroleum sector (natural gas in particular) during the period. A significant change in the composition of FDI was also witnessed during the prereform and postreform periods. Manufacturing and mining and quarrying registered a sharp decline during the postreform period as against the prereform era. On the other hand, commerce, construction, and utilities experienced substantial increase in total FDI during the postreform period. 15 It may be noted that the share of utilities in total FDI jumped from almost zero in 1993 to 31.7% in 1994. This massive increase was entirely due to the inflow of FDI in the power sector with the Hubco Corporation alone accounting for Rs 7 billion out of Rs 7.6 billion in 1994.

¹⁵A sharp increase of FDI in the commerce sector during 1992-1994 is due mainly to the inflow in the financial service subsector.

In the remaining economic sectors (i.e., agriculture, transport, storage and communication) the flow of FDI has been meager and erratic because of the limited opportunities open for foreign exploitation in these areas.¹⁶

TABLE 4
Inflow of FDI by Economic Group
(million Rs.)

Agriculture, Forestry, Transport Hunting, Mining and Storage, a								nd		
Year	and Fishing	Quarrying	Manufacturing	Construction	Utilities	Commerce	Communication	Others	Total	
1980	_	72.1	218.9	3.9	_	5.2	1.5	-8.3	293.3	
1981	2.2	81.6	260.8	2.0	_	-16.6	5.8	97.0	432.8	
1982	0.7	112.2	342.0	1.9	_	-5.0	1.2	5.3	458.3	
1983	1.5	236.9	139.0	2.3	_	120.0	10.7	24.3	534.7	
1984	1.4	21.8	279.4	0.8	_	150.3	10.8	46.5	5110.0	
1985	13.9	134.6	251.7	0.2	_	281.3	13.1	57.3	752.1	
1986	6.2	242.3	403.3	0.2	0.9	569.9	55.6	67.9	1528.3	
1987	0.5	1080.3	186.2	_	0.9	487.3	48.7	102.0	1905.9	
1988	_	1169.2	281.5	-3.5	4.3	740.4	124.0	80.1	2396.0	
1989	44.6	2076.2	322.9	340.6	_	735.8	177.2	71.6	3768.9	
1990	_	2068.0	522.1	641.0	1.3	2337.7	300.3	143.1	6013.4	
1991	_	2928.5	1044.5	333.8	4.4	2138.7	-68.4	59.9	6441.4	
1992	_	373.1	1074.3	3268.4	863.4	3096.9	-23.9	349.3	9001.5	
1993	_	1100.9	1236.6	1941.7	1.6	6831.6	21.4	36.6	11170	
1994	68.4	1105.4	8409.2	2565.1	7622.9	3242.7	487.9	512.2	24013	

Source: State Bank of Pakistan, Foreign Liabilities and Assets and Foreign Investment in Pakistan (various issues).

D. Factors Influencing the Flow of FDI in Pakistan

Before the Asian crisis, the world had experienced rapid growth in the flow of FDI, which rose from \$204.2 billion in 1990 to \$400.5 billion in 1997 (see Appendix table). Developing countries have made impressive gains in attracting FDI, the flow rising from \$33.7 billion to nearly \$150 billion during the same period. The gains owe, to a large extent, to the growing attractiveness of the PRC, which accounted for 30.4% of total FDI to developing countries in 1997. The Asian countries have also strengthened their role as the largest developing-country FDI recipient region with an estimated \$87 billion of inflows in 1997. The East and Southeast Asian countries have attracted \$82 billion in FDI in 1997 accounting for 21% of the total world flows and 55% of total developing countries' flows.

Viewed in the background of these developments, the inflow of FDI in Pakistan remains far from encouraging despite numerous incentives offered to foreign investors, particularly after the liberalization program initiated since 1991/1992. Incentives like 100% foreign ownership of capital, foreign investors operating their companies without enlisting in the local stock exchanges, no limit for remittance of profits and dividends abroad,

¹⁶As stated in Section II, these sectors were liberalized only in November 1997.

TABLE 5
Shares of Different Economic Groups in Total FDI (percent)

Year	Agriculture, Forestry, Hunting, and Fishing	Mining and Quarrying	Manufacturing	Construction	Utilities	Commerce	Transport, Storage, and Communication	Others
1980		24.6	74.6	1.3		1.8	0.5	2.8
1981	0.50	18.9	60.2	0.46	_	-3.8	1.3	22.4
1982	0.15	24.5	74.6	0.41	_	-3.6 -1.1	0.3	1.1
1983	0.28	44.3	26.0	0.43	_	2.2	2.0	4.5
1984	0.27	4.3	54.7	0.15	_	29.4	2.1	9.1
1985	1.85	17.9	33.5	0.3	_	37.4	1.7	7.6
1986	0.40	27.8	26.4	0.01	0.05	37.3	3.6	4.4
1987	0.03	56.7	9.8	_	0.05	25.6	2.5	5.4
1988	_	48.8	11.7	-0.15	0.18	30.9	5.2	3.3
1989	1.18	55.1	8.6	9.04	_	19.5	4.7	1.9
1990	_	34.4	8.7	10.66	0.02	38.9	5.0	2.4
1991	_	45.5	16.2	5.18	0.07	33.2	-1.1	0.9
1992	_	4.1	11.9	36.31	9.59	34.4	-0.3	3.9
1993	_	9.8	11.1	17.38	0.01	61.1	0.2	0.3
1994	0.28	4.6	35.0	10.68	31.74	13.5	2.0	2.1
Average								
1980-94	0.33	28.1	30.9	6.1	2.8	24.3	2.0	4.4
1991-94	_	16.0	18.5	17.4	10.3	35.5	0.2	1.8

Source: Calculated from the information contained in Table 4.

allowing disinvestment of the originally invested capital at any time, and no prescribed limits for remittance of royalties and technical fees abroad by foreign investors are highly competitive with incentives offered by many other developing countries to the prospective foreign investors.

Besides these incentives, Pakistan with a population of about 130 million offers a vast potential for the marketing of both consumer and durable goods. Various incentives apart, these two factors should alone have attracted a respectable amount of FDI in Pakistan. However, by looking at the amount of FDI in Pakistan in recent years, it appears that the incentives and other factors have resulted in limited success. Why was Pakistan not able to attract FDI like the PRC; Hongkong, China; Malaysia; and Thailand despite offering competitive incentives, favorable geographical location, and a relatively large population? This section attempts to provide answers to this query.

A summary of host country determinants of FDI in general is given shortly. In view of these determinants, the fundamental requirement that governs foreign investment in Pakistan revolves around ten main factors, which could be called the ten checkpoints. These are political stability; law and order; economic strength; government economic policies; government bureaucracy; local business environment; infrastructure; quality of labor force; quality of life; and welcoming attitude (see Shirouzu 1993).

Host Country Determinants of FDI

Hos	st Country Determinants	Type of FDI Classified by Motives of Firms	Principal Economic Determinants in Host Countries
I.	Policy Framework for FDI	A. Market-seeking	Market size and per capita income
	Economic, political, and social stability		Market growth
	Rules regarding entry and operations		Access to regional and global markets
	Standards of treatment of foreign affiliates		Country-specific consumer preferences
	Policies on functioning and structure of markets (especially		Structure of markets
	competition and policies governing mergers and acquisitions)	B. Resource/ Asset-seeking	Raw materials
	International agreements on FDI	risset seeking	Low-cost unskilled labor
	Privatization policy		Skilled labor
	Trade policy (tariffs and nontariff barriers) and coherence of FDI and trade policies		Technological, innovative and other created assets (for example, brand names), including as
	Tax policy		embodied in individuals, firms, and clusters
II.	Economic Determinants		
III.	Business Facilitation	C. Efficiency Seeking	
	Investment promotion (including image-building and investment-		Physical infrastructure (ports, roads, power, telecommunications)
	generating activities and investment-facilitation services)		Cost of resources and assets listed above, adjusted for labor productivity
	Investment incentives		•
	Hassle costs (related to corruption and administrative efficiency		Other input costs, such as transport and communication costs to/from and within the host economy and other intermediate
	Social amenities		products
	(for example, bilingual schools, quality of life)		Membership in a regional
	After-investment services		integration agreement conducive to the establishment of regional corporate networks

Source: UNCTAD, World Investment Report (1998, 91).

(i) Political Stability

This factor is essential to attract foreign direct investment because it creates confidence for foreign investors (see MIGA 1994). Political turmoil could wipe out overnight even the most lucrative investments and endanger the lives of personnel. Many investors have paid a heavy price for overlooking or ignoring this factor in other parts of the world (Jegathesan 1995). Lack of political stability has been the hallmark of Pakistan during the last eight years (1988-1996). Three elected governments were dismissed on various charges while four caretaker regimes each remained in power for only 90 days over the last eight years. Such a frequent change in government accompanied by abrupt changes in policies and programs are hardly congenial for foreign investors.

(ii) Law and Order

An unsatisfactory law and order situation keeps prospective foreign investors on the sidelines. Safety of capital and the security for the personnel engaged in the projects are essential ingredients that govern foreign investment. Unfortunately, Pakistan's law and order situation has remained far from satisfactory in the major growth poles of the country. Karachi, the largest industrial and commercial center and the only commercial port of the country, has been disturbed in varying degrees since 1989. In recent years the law and order situation has also deteriorated in the Punjab province. Notwithstanding attractive incentives offered to foreign investors, this factor has discouraged them to set up their businesses in Pakistan.¹⁷

In a recent survey, the International Asset Management Company (IAMC), an affiliate of the British-based Morgan Stanley Asset Management, found that the business environment in Pakistan has deteriorated considerably. The IAMC surveyed 115 leading listed and unlisted companies including multinationals operating in Karachi. The sector covered for the survey included automobiles, banks, chemicals, insurance, energy, textile and apparel, financial services and electrical goods. Some 74% of investors answered that they had no investment plan for 1996/1997, while in 1995/1996 some 56% of those had not invested in Pakistan. The key reason for the negative sentiment of businessmen was the deteriorating law and order situation in Karachi. Three out of four businessmen interviewed blamed political instability as the major constraint facing business today and over 59% of the 115 respondents were not pleased with government policies.

(iii) Economic Strength

Investors would not want to invest in a country where the economic fundamentals are so weak that it is unpredictable what the government would do next to prop up a sagging economy. In countries of high economic strength, the investor is assured of a growing of high economic strength, economy, and of increased opportunities for business, as more government development projects and private sector investments put purchasing power in

¹⁷Business Recorder (26 March 1996), a local newspaper, quoted a member of the Japanese delegation to Karachi, as saying that "they were worried about the prevailing disturbed law and order situation in Karachi and that they also witnessed a strike in Karachi which in its wake paralyzed the city's business activity". These impressions of the visiting Japanese businessmen, by and large, explain the reservations on the part of foreign investors.

the hands of the people. Increased purchasing power means increased positive multiplier effects on the economy and a source for stability. Furthermore, foreign investors are unlikely to increase their participation in economies that are expected to remain affected by foreign exchange scarcities for several years into the future (UNCTAD 1985).

As compared with the decade of the 1980s, Pakistan's macroeconomic imbalances worsened in the 1990s, along with the slowdown of economic activity. Annual average GDP growth slowed from 6.4% in the 1980s, to 3-4% in the 1990s. In particular, large-scale manufacturing has slowed down to 2-3% as against almost 8.0% during the 1980s.

The large fiscal deficit has emerged as a major source of macroeconomic imbalances in Pakistan. Slippages on both the revenue and expenditure sides contributed to mounting financial imbalances. The rate of inflation has averaged 11% during the 1990s as against an average rate of 7.3% in the 1980s. Pakistan's external sector also remained under pressure during the 1990s as compared with the 1980s. The current account deficit averaged 4.4% of GDP as against 3.9% during the 1980s. Pakistan's foreign exchange reserves have also fluctuated in an unpredictable manner in the 1990s. Thus, attractive incentives notwithstanding, the large macroeconomic imbalances and slowing down of economic activity must have discouraged FDI in Pakistan.

(iv) Government Economic Policies

Pakistan's track record in maintaining consistent economic policies has been poor. The abrupt changes in policies with a change in government as well as a change in policy within the tenure of a government have been quite common. Pressures to raise revenues (for fiscal consideration), and other conflicting objectives have generally led to inconsistencies in investment and industrialization policies, and an ad hoc and changing incentive system. Revenue measures are not in harmony with the industrial policies. Several instances of change in policy stance in recent years can be identified. For example, the process of privatization slowed down considerably with the change in government. As against the privatization of 63 units in two years (1991/1992 and 1992/1993), only 20 units were privatized in three years (1993/1994 to 1995/1996). Similarly, with the change in government a drastic change was made in the Lahore-Islamabad motorway project. Another example concerns the concessions given to the petroleum and power sectors in terms of duty-free imports of machinery. Resource crunch forced the government to withdraw this concession by imposing a 10% regulatory duty in October 1995. It took several months to get the petroleum sector concession restored but the regulatory duty was reimposed in the 1996/1997 federal budget. The serious disagreement in 1998 between the GOP and IPPs on the purchase of electricity by the WAPDA aggravated investors' confidence.

The investment approval requirement has been removed but other regulations instituting the need for other administrative approvals, however, are still in place. Numerous permits and clearances from different government agencies at national, regional and local levels still apply to investors.

Incentives/concessions to foreign investment apart, private investors continue to face a plethora of federal, provincial, and local taxes and regulations. Federal levies include custom duties, sales tax, withholding tax at import stage, and excise duty. At the provincial level there are stamp duties, professional taxes, boiler inspection fees, and weight and measures fees. In addition, local government taxes are levied, including a local metropolitan tax, and the Octroi. At the federal and provincial levels, labor taxes have to be paid separately

in compliance with labor laws, such as the contributions to the Workers Welfare Fund, Social Security, worker's children's education, and workers participation in profit and group insurance. In particular, a 5% withholding tax at the import stage as well as restrictions that these firms cannot borrow more than their equity capital have caused serious cash flow problems.

Foreign investors in Pakistan also have to cope with a complex legal situation. Law based on different legal systems are applied independently. Uncertainty is exacerbated by the practice of issuing Special Regulatory Orders (SROs) that can amend or alter existing laws. Over time many SROs have been issued under a particular law, changing its scope and intent.

(v) Government Bureaucracy

This could perhaps be the biggest "burden" in any investment environment. It does not matter how efficient the government thinks its investment policy is; what is critical is the perception of businessmen, especially those already in the country. Do businessmen feel that they have the support of government officials in their efforts to set up and operate efficient business units, or do they feel that they have to fight the government to get projects off the ground?

The general perception of businessmen in Pakistan is that there exists a large gap between the policies and their implementation (Shirouzu 1993). The implementation of policies has been slow and the bureaucracy has not responded to the initiatives with conviction. Such perception about the slow implementation of policies is not at all conducive to attracting FDI.

(vi) Local Business Environment

This covers many factors, including the availability of local lawyers, secretarial services, accountants, architects and building contractors, local consultants, etc.—all required both before and during the life of a project. Also, there is the question of the availability of ancillary and supporting industries, their quality, and their cost. Another question would be the availability of suitable joint venture partners, and whether there are lists of potential partners that the investors can choose from. All these conditions are not satisfactory in Pakistan.

(vii) Infrastructure

The availability, reliability, and cost of infrastructure facilities (power, telecommunications, and water supplies) are important ingredients for a business environment conducive to foreign investment. Pakistan compares unfavorably in infrastructure facilities with other developing countries that have attracted higher levels of foreign investment. Pakistan has only 18% of paved roads in good condition as against 50% in Thailand, 31% in Philippines, and 30% in Indonesia. Pakistan's extensive but poorly managed railway

¹⁸Another example of slow implementation of policies concerning investment activity is that out of 132 Memorandum of Understanding (MOUs) signed during the previous regime, only 39 had made little progress.

system does not make good for this disadvantage. Telecommunication is another bottleneck: there are only 10 telephones per 1,000 persons in Pakistan compared with 31 and 112 in Thailand and Malaysia, respectively. Pakistan's amount of electricity produced per capita is higher than Indonesia's (435 kWh as against 233 kWh), but is only a fourth of Malaysia's and one half of Thailand. In most cases the urban infrastructure is grossly inadequate. Only 50% of population have access to safe drinking water as against 81, 72, and 78% for Philippines, Thailand, and Malaysia, respectively. 20

Karachi Port is six times more expensive than Dubai port (Jebal Ali), three times more expensive than Colombo port, and twice as expensive as Bombay port. While other ports offer goods container terminal facilities, Karachi port cannot even offer priority berthing for container vessels. There are frequent delays and cancellations of berthing and sailing due to obsolete tugs and pilot boats at Karachi port. Moreover, due to the lack of maintenance the berths are unsafe. Karachi port cannot even provide proper container handling equipment and there is a shortage of space and bad planning, resulting in high cost to the consignees. Large vessels cannot come to the port because of the lack of dredging of shipping channels. Moreover, congestion in the hazardous cargo results in containers being detained longer in the barge. All these have made Karachi port much more expensive than ports of neighboring countries (see Table 6 for itemwise costs at Karachi port and other ports of neighboring countries). Such infrastructure deficiencies have discouraged the flow of FDI in Pakistan.

TABLE 6
International Comparison of Cost Structure of Port Handing (US\$)

	Karachi	Colombo	Jebal Ali	Bombay
Pilotage	2100	288.4	436	1680
Port Dues	3220	1820.0	Nil	1190
Dockage	1120	210.0	229	1540
Tug Hire	2238	292.0	640	Nil
Channel Dues	Nil	Nil	Nil	Nil
Line Handlers	Nil	Nil	164	Nil
Entering Dues	Nil	288.4	Nil	Nil
Pilot Fee	Nil	60.0	Nil	Nil
Pilot Boat	9	Nil	Nil	Nil
Mooring Launch	135	Nil	Nil	Nil
Total Charges	8822	2958.8	1469	4410

Source: Overseas Investors Chamber of Commerce & Industry, Karachi.

¹⁹Realizing the fact that Pakistan earlier faced severe deficiencies in power, a highly attractive power sector policy was announced in March 1994 with a view to attracting FDI in this sector. This is discussed in Section IV.

²⁰All the information pertaining to infrastructure are taken from the *World Development Report 1995* (World Bank 1995). For a comprehensive review of Pakistan's infrastructure, see Kemal and Shabbir (1995).

(viii) Labor Force

A technically trained, educated, and disciplined labor force along with a country's labor laws are critical factors in attracting foreign investors. Pakistan has an acute shortage of technically trained and educated labor, especially in middle managerial positions and in engineering, which may have discouraged foreign investors. In particular, Pakistan is at a more serious, disadvantaged position in terms of education and health compared with other developing countries that have attracted FDI at much higher levels. Pakistan's adult illiteracy rate is 62% as against 17% for Malaysia, 16% for Indonesia, 5% for Philippines, and 6% for Thailand. Only 80% of primary school age boys are enrolled in school (49% for girls); the lowest rate for the four reference countries is 93% for Malaysia. Pakistan's expenditure on education accounts for only 1.1% of total expenditure as against 10% for Indonesia, 15.9% for Philippines, 21.1% for Thailand, and 20.3% for Malaysia (World Bank 1997). It also has by far the worst indicators of public health among the five countries. With the general level of education and health care being low, foreign investors may not find the workforce they need.

Besides poor education and health indicators, Pakistan's labor laws are complicated and overprotective, discouraging job creation, inhibiting business expansion, and frightening away much needed productive investment. Such labor laws have created unnecessary labor disputes posing problems for management and causing productivity losses, which have also discouraged foreign investment (Shirouzu 1993).²¹

(ix) Quality of Life

Quality of life along with cultural and social taboos is critical to attract foreign investors. These factors are less conducive to foreign investors in Pakistan who are accustomed to liberal lifestyles. This is in fact, one of the largest hidden handicaps Pakistan possess against NIEs and ASEAN countries (Shirouzu 1993). Foreign investors find better conditions in Indonesia and Malaysia (both Muslim countries) in the ASEAN region in terms of social life and quality of life.

(x) Welcoming Attitude

Have immigration and customs officials at the airports and other entry points been fully briefed about the critical role they play in investment promotion efforts? Their attitudes play an important role in foreign investors' decision making. Although the high government officials and business leaders express their enthusiasm in inviting foreign investment, the lack of a cordial environment to accommodate foreigners and foreign investment prevails in Pakistan. The ancillary government agencies and officials seem to have an indifferent and unsympathetic attitude toward foreign investors (Shirouzu 1993).

The ten checkpoints discussed above constitute an investment environment and can be classified into four factors, namely, cost, convenience, capability, and concessions. All these factors do not appear to be so favorable as in East and Southeast Asian economies.

²¹See also the letter from Secretary General, Overseas Investors Chamber of Commerce and Industry addressed to Shahid Javed Burki, Advisor to Prime Minister on Finance, Planning and Economic Affairs, dated 24 November 1996.

E. Economic Effects of FDI

FDI has emerged as not only a major source of much needed capital but is also considered to be a major channel for the access to advanced technologies and intangibles such as organizational and managerial skills, and marketing networks by developing countries. Globally, FDI has grown rapidly in recent years, faster than international trade. Developed countries were the key force behind the record FDI flows but developing countries also experienced a spectacular rise in the flows, reaching as high as \$150 billion in 1997. How far have the inflows of FDI affected the level of economic activity in the host countries? This question has been extensively investigated in recent years.²²

The inflow of FDI can "crowd in" or "crowd out" domestic investment and its effect on saving is ambiguous. FDI has a positive overall effect on economic growth but the magnitude of this effect depends on the stock of human capital available in the host economy. A high positive correlation between aggregate inflows of FDI and the host countries' aggregate exports has been found, while the inflow of FDI tends to increase the host country's imports.²³

Views, however, diverge regarding the effect of FDI on balance of payments. Critics argue that while the initial impact of an inflow of FDI on the host country's balance of payments is positive, the medium-term impact is often negative, as the investors increase imports of intermediate goods and services and begin to repatriate profit. On the other hand, it is argued that the impact of FDI on the balance of payments depends on the exchange rate regime. Under flexible exchange rates, any disturbance to the balance between supply and demand for foreign exchange is corrected by a movement in the exchange rate. In the case of a fixed exchange rate regime, a net increase in the demand for foreign exchange by the FDI project will result in a reduced surplus or increased deficit in the balance of payments. Empirical evidence suggests that an inflow of FDI has a bigger positive impact on host country exports than on host country imports. Hence, the balance of payments problems, if they do occur, are likely to be small (WTO 1996).

The inflow of FDI in Pakistan is not only a recent phenomenon but it also does not form a high percentage of GDP or domestic fixed investment. As shown in Table 7, FDI as percentage of GDP remained less than one percent until 1994/1995 but rose to 1.69% in 1995/1996, due to large FDI in the power sector. FDI as a percentage of gross fixed investment averaged 3.5% during 1984/1985 to 1995/1996. Thus, given its low share in GDP and fixed investment, FDI is not expected to have a significant impact on various sectors of the economy.

What was the impact on Pakistan's imports and exports? First, most empirical research suggests that inflow of FDI tends to increase the host country's imports. One reason is that MNCs often have a high propensity to import intermediate inputs, capital goods, and services that are not readily available in the host countries.²⁴ Some studies indicate that the impact of FDI inflow on a host country's imports is either nil or that it slightly reduces the level of imports (Hill 1990). If FDI is concentrated in import substitution industries, then it is expected to affect imports negatively because the goods that were imported are now

²²See, for example, Fry (1996), WTO (1996), and Borensztein et al. (1995).

²³See Lipsey and Weiss (1981, 1984); Hummels and Stern (1994); Graham and Anzai (1994); and Naujoks and Schmidt (1995).

²⁴See Graham and Krugman (1993), Graham and Anzai (1994), Hill (1990), and Naujoks and Schmidt (1995).

produced in the host country by foreign investors (Fry 1996). In order to examine the impact of FDI on Pakistan's imports, we tested an import demand function.²⁵

Results suggest that the inflow of FDI increases imports with a lag of one year. The coefficient is statistically significant with a positive sign and suggests that a 10% increase in the inflow of FDI increases imports by 1.8 percent. Income elasticity of import demand is less than unity (0.8) indicating that a 10% increase in real GDP increases imports by 8 percent.

TABLE 7 **FDI as Percentage of GDP and Fixed Investment**

	FDI as Percentage of				
Year	GDP	Fixed Investment			
1984/1985	0.2 2	1.37			
1985/1986	0.45	2.68			
1986/1987	0.32	1.85			
1987/1988	0.42	2.56			
1988/1989	0.52	3.03			
1989/1990	0.54	3.13			
1990/1991	0.54	3.10			
1991/1992	0.69	3.69			
1992/1993	0.59	3.10			
1993/1994	0.68	3.80			
1994/1995	0.73	4.25			
1995/1996	1.69	9.45			
Average 1984/1985-					
1995/1996	0.61	3.50			

Source: Government of Pakistan, Economic Survey 1996/97.

Several studies have found a high positive correlation between the inflow of FDI and the host countries' aggregate exports. Evidence based on sectoral studies indicates that FDI is found often undertaken by companies that are already significant exporters (WTO 1996). These findings are supported by studies that have found that foreign-owned firms tend to export a greater proportion of their output than do their locally owned counterparts. Presumably foreign firms typically have a comparative advantage in their knowledge of international markets, in the size and efficiency of their distribution networks, and in their ability to respond quickly to changing patterns of demand in world markets.

Where M is real demand for imports, y real GDP, and Pm/Pg relative price of imports (price of import deflated by GDP deflator).

²⁵ln $M = 1.60 + 0.80 \ln y - 0.22 \ln (Pm/Pg) + 0.18 \ln (FDI)_{-1}$ (0.32) (2.09) (0.69) (1.96)

 $R^2 = 0.92$; DW = 2.73; F = 39.03; SER = 0.056; t-values in parentheses

²⁶See for example, Hummels and Stein (1994), Wells (1993), Fry (1996), and Naujoks and Schmidt (1995).

²⁷See Hill (1990) and Noujoks and Schmidt (1995).

There can also be policy-based linkages between FDI and host country exports. Performance requirements that demand MNC affiliates to export a part of their production, and FDI incentives that are limited to or favor export-oriented sectors, are examples of policies that can produce or strengthen a positive correlation between inflows of FDI and exports. A classic example of such policies is export processing zones (EPZs). Many foreign firms have established operations in these zones, which have been set up by the host country government with the goal of stimulating exports, employment, skill upgrading, and technology transfer.

What is the evidence in the case of Pakistan? What is the impact of FDI on Pakistan's exports? To answer these questions, a simplified export function was tested.²⁸

The estimated coefficients of FDI (both contemporaneous and one year lag) are statistically insignificant. This finding suggests that the inflow of FDI has largely been directed toward import-substitution industries or production for the domestic market while little has gone toward export-oriented industries. When these two set of results (both import and export equations) are taken together, it appears that FDI has worsened the country's trade balance. The inflow of FDI has tended to increase imports more than exports, suggesting a deterioration in the trade balance. The income elasticity of exports is considerably higher than unity, suggesting a one percent increase in real income increases exports by 1.38 percent. The relative price of exports is unit-elastic, suggesting that a one percent increase in relative price reduces exports by one percent.

IV. Concentrated FDI in the Power Sector and its Balance of Payments Implications

A. Introduction

If it is not the "engine of growth", infrastructure is certainly the "wheels" of economic activity. Empirically a strong positive association exists between the availability of certain infrastructure—power, telecommunications, paved roads, and access to safe water—and per capita GDP.²⁹ The generally poor performance of state-owned monopolies, combined with the rapid globalization of world economies, has brought into sharp focus the economic costs of inadequate infrastructure and has prompted a growing number of developing countries to take active steps to promote competition, encourage the private sector including foreign investment in infrastructure. Between 1993 and 1995 the estimated private participation in infrastructure rose from \$17 billion to \$35 billion in developing countries (see IFC 1996).

In the last decade and a half, growth of population, per capita income, and rapid urbanization have generated a great deal of demand for transport, power, telecommunications, and water in Pakistan. The supply of these services, on the other hand, has not expanded sufficiently fast to prevent the emergence of gross shortage. Among various infrastructure constraints, power has emerged as the most serious bottleneck constraining

 $^{^{28}}$ ln $X = -3.24 + 1.38 \ ln \ y - 1.02 \ ln \ (Pg/Px) + 0.07 \ ln \ (FDI) + 0.06 \ ln \ (FDI)_{-1}$ (0.60) (3.10) (3.23) (0.73) (0.58) $R^2 = 0.97$; DW = 1.36; F = 102.7; SER = 0.07; t-values in parentheses.

Where X is real export; y real GDP; P export price; and Pg GDP deflator.

²⁹For empirical evidence, see World Development Report 1994 (World Bank 1994).

the economy's long-term growth and development possibilities. The rationing of electricity (load-shedding) to metropolitan and industrial areas has become a common feature in Pakistan since the early 1980s and has given rise to social costs (the frustration of household users) as well as economic costs in terms of lost manufacturing output. The Task Force on Energy (1994) noted the loss of industrial output due to load shedding in the neighborhood of Rs 12 billion. Stone (1995), in a survey of 200 industrial enterprises in Pakistan found that these firms lost an average of 21 workdays a year to electric power shortages alone.³⁰

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Removing Pakistan's power shortages required a large amount of capital and strong incentives that were beyond the resources and institutional capabilities of the public sector. From 1994 to 1996, efforts to rectify power shortages were focused on encouraging domestic and foreign private investors to participate in the generation of electricity. The policy was highly welcomed by foreign investors, mostly from the US and the UK. Two to three years after the initiation of the policy, there are now serious apprehensions about overcapacity and balance of payments implications.

B. State of the Power Sector up to the Mid-1990s

Electricity consumption in Pakistan has grown at a faster rate than real GDP. The average annual growth rate of electricity consumption from 1980/1981 to 1994/1995 was 9.3% against 5.7% growth of real GDP (an elasticity of 1.6). In spite of rapid growth in electricity consumption, Pakistan's per capita consumption of electricity is far less than many other developing countries. In 1995 per capita consumption of electricity in Pakistan was 340 kWh against the PRC (448 kWh), Thailand (636 kWh), Iran (724 kWh), Malaysia (1146 kWh), and Asia on average (1235 kWh) (Ansari 1996). Pakistan's generation capacity of 7 KW per 100 population is less than the corresponding figures of 7.5 KW in Sri Lanka, 9 KW in India, and 12 KW in PRC. At the same time, power system losses of 24% in Pakistan are far above the 18% in Sri Lanka, 19% in India, 15% in PRC, and 20% or less in the case of Chile, Ghana, Indonesia, Kenya, Malaysia, Morocco, Thailand, and Turkey (Esfahani 1995).

Electricity in Pakistan is supplied by vertically integrated public utilities, namely Water & Power Development Authority (WAPDA) and Karachi Electric Supply Corporation (KESC), which are responsible for generation, transmission, and eventual distribution to end-users. WAPDA with a franchise area of about 770,000 sq. km., and an electricity consumption density of 45.5 kWh per sq. km. (1994/1995) serves a large decentralized power distribution operation through area electricity boards. KESC on the other hand, with a franchise area of about 6024 sq. km. and an electricity consumption density of 935 kWh per sq. km. (1994/1995) serves basically the Karachi Division, part of Thatta District in Sindh, and Uthal, Bela and other parts of Baluchistan (Ansari 1996). Apart from WAPDA and KESC, the Pakistan Atomic Energy Commission (PAEC) also operates a 137 MW Nuclear Power Station near Karachi. There are also few captive power plants in the country, with an approximate installed capacity of 237 MW (Manzoor 1996).

³⁰This survey was carried out under a private sector assessment study by the World Bank on the infrastructural bottlenecks in Pakistan. On the scale of 1 to 5 indicating the severity of obstacles to their operations and growth, the surveyed firms on average ranked infrastructure constraints as 3.4, after political and economic instability. Among infrastructure constraints, Pakistani enterprises ranked power breakdowns (4.2), voltage fluctuations (3.8), road quality (3.6), and telecommunications (2.8) as their most important problems (see Stone 1995).

Out of total electricity generated in the country in 1995/1996, WAPDA was responsible for 86% of generation while KESC maintained a share of 13%, and the remaining one percent came from PAEC and captive power plants. There are three primary modes of power generation in Pakistan, namely, hydel, thermal, and nuclear. Among these modes, thermal accounts for 62% while hydel and nuclear account for 37% and 1%, respectively. The current installed generation capacity as of January 1996 in Pakistan adds up to 12988 MW; of this, hydel capacity represents 4825 MW, thermal capacity represents 8026 MW, and the balance is nuclear capacity of 137 MW. Meanwhile, WAPDA's generation capacity stood at 11113 MW. The KESC capacity totaled 1738 MW, 137 MW of which was nuclear.

Until the 1970s, the industrial sector was the largest consumer of electricity, accounting for more than 50% of total electricity consumption. Rural electrification programs combined with rising income levels encouraged people to use electrical appliances in the home, which were translated into a higher growth rate of electricity consumption by the domestic sector. In fact, percentage share of electricity consumption by the domestic sector has increased dramatically from 32.4% in 1990/1991 to 40.5% in 1995/1996. On the other hand, the electricity consumption by the industrial sector declined equally sharply from 34.3% to 28.9% during the same period (see Table 8).

TABLE 8
Electricity Consumption by Economic Group
(percent)

	Electricity Consumption as Percent of Total							
Economic Groups	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96		
Domestic	32.4	33.1	35.9	37.2	38.4	40.5		
Commercial	4.3	4.1	4.2	4.1	4.2	4.7		
Industrial	34.3	34.9	34.9	32.8	30.3	28.9		
Agricultural	21.7	19.9	17.9	17.9	17.7	18.4		
Bulk Buyers	7.8	7.9	7.1	7.9	9.3	7.5		
Public Light	0.1	0.1	0.1	0.1	0.1	0.1		

Source: ABN AMRO Bank, Economic Bulletin (1996).

Besides rural electrification and rising income levels, the tariff structure may have influenced the electricity consumption by various economic groups. Table 9 documents such information. The existing tariff structure subsidizes domestic households and the agricultural sector at the expense of commercial and industrial users.

TABLE 9
Cross-subsidization of Tariffs

	Consumption as Percent of Total			f Billing rcent)	Price per unit (Rs/KWH)	
Economic Groups	1993/94	1994/95	1993/94	1994/95	1993/94	1994/95
Residential	37.2	38.4	27.1	28.8	0.6154	0.6339
Commercial	4.1	4.2	11.3	11.9	2.3166	2.3373
Industrial	32.8	30.3	43.9	40.8	1.1292	1.1376
Agricultural	17.9	17.7	8.8	8.8	0.4200	0.4199

Source: ABN AMRO Bank, Economic Bulletin (1996).

In fact, the commercial sector pays more than 5 times higher per unit of electricity and industry pays 2.7 times higher per unit as compared with the agricultural sector.

C. Demand-Supply Situation

Electricity demand in Pakistan over the past 30 years has been driven by increasing rates of urbanization, sustained economic growth and rising income levels, and to some degree by a tariff structure that has generally subsidized household consumers over industrial and commercial consumers. Table 10 reports the growth in demand for electricity by various economic groups. Over the past decade electricity consumption by households grew at an average rate of almost 12% per annum followed by agriculture (7.8%), industry (7.3%), and commercial (6.4%). As against the second half of the 1980s, in the 1990s the growth in electricity consumption has slowed down considerably across all economic groups in general but agriculture and industry in particular. Decline in industrial and agricultural production in the first half of the 1990s along with tariff adjustment have been instrumental in reducing electricity demand in these two sectors. The relatively higher growth rate exhibited by domestic consumers is partly due to 410,000 new connections provided by WAPDA in 1994, 88% of which was in the residential sector. The growth in demand for electricity outstripped the growth in the number of consumers in all sectors, implying an increase in the intensity in power use by consumers (about 5% in the 1990s) (Manzoor 1996).

TABLE 10

Growth in the Electricity Demand by Various Economic Groups (percent)

Economic Groups	1985/86 to 1989/90	1990/91 to 1994/95	1985/86 to 1994/95
Domestic	13.1	10.8	11.9
Commercial	6.8	6.0	6.4
Industrial	10.6	4.1	7.3
Agricultural	11.1	4.6	7.8

Source: The Government of Pakistan, Islamabad.

In 1994/1995, the National Power Plan (NPP) made projections of the future demand for electricity for the period up to the year 2008. In so doing, it generated three alternative scenarios by taking into account the expected economic growth, technological changes and changes in lifestyle that collectively influence the future power requirements. The three forecasts under alternative scenarios, namely, Reference Forecast (High Forecast), NPP Base Forecast (Medium Forecast), and NPP Forecast with Demand Side Management (DSM) (low forecast) are documented in Table 11.

Under the Reference Forecast, electricity demand (in MW) is projected to grow at an average annual rate of 8.8% (taking 1993/1994 as the base year) until the end of the 10th Five-Year Plan period, i.e., 2008. The NPP with DSM tries to incorporate the price effect whereby tariff increases will reduce the growth of energy demand. In the year 2000, the NPP Base forecast for peak demand is 13628 MW, about 10% lower than the peak demand under Reference Forecast. Similarly, the NPP forecast with DSM in the Year 2000 is 12632 MW, which is 16.5% lower than the Reference forecast. By the Year 2008 the peak demand under NPP Base forecast and with DSM are 22% and 33% lower than the Reference forecast.

The power supply situation was not likely to match the growing demand. The installed capacity during the last one decade increased from 6298 MW in 1985/1986 to 12100 MW in 1994/1995 and by January 1996 it was increased to 12988 MW. As against an annual average increase in demand of 8.4%, installed capacity grew by an average rate of 8.1% during the last one decade. Since installed capacity refers to maximum generation capacity, the actual supply is far less.

TABLE 11
National Power Plan (NPP) Peak Demand Projections
under Alternative Scenarios
(megawatts)

Year	Reference Forecast	NPP Base Forecast	NPP Forecast with DSM ¹		
1994	9127	9178	9178		
1995	9930	9754	9754		
1996	10804	10371	10178		
1997	11755	11028	10647		
1998	12789	11747	11177		
1999	13915	12681	11906		
2000	15139	13628	12632		
2001	16471	14649	13423		
2002	17921	15778	14307		
2003	19498	16932	15201		
2004	21214	18047	16041		
2005	23081	19234	16948		
2006	25112	20434	17856		
2007	27321	21709	18831		
2008	29726	23127	19929		
Average Growth	8.8%	6.8%	5.7%		

¹Demand Side Management.

Source: National Power Plan Update 1994-95.

WAPDAs line losses have been estimated at 24% of generation. Since WAPDA's average utilization is 49% of installed capacity, this implies that for each MW of installed capacity, only 0.4 MW is actually supplied. KESC line losses are even larger (at 32%), which implies that only 0.37 MW can be supplied for each MW of installed capacity (see Naqvi 1996). Therefore, a large demand-supply gap under two alternative scenarios was expected. The peak load demand-supply gap was estimated between 500 MW to 700 MW for 1995 which was projected to increase in the range of 3000-4500 MW by the year 2000.

D. Salient Features of the 1994 Power Policy

Since Pakistan's government was not in a position to undertake such a gigantic power project to minimize the gap, efforts to rectify these shortages were focused on encouraging the private sector (both domestic and foreigners) into power generation. Such a large gap in demand and supply, along with outdated transmission and distribution networks and poor maintenance of plants and equipment could have wreaked havoc with household consumers and industries.

In order to attract the private sector into power generation, a highly lucrative and internationally competitive private power policy was formulated by the GOP in March 1994. The salient features of the 1994 Power Policy are:

- (i) Investors are free to choose the site and opt for the fuel type and technology subject to certain restrictions.
- (ii) The GOP provides a guaranteed market for the power supplied by the private sector that the power will be purchased by WAPDA/KESC under a long-term contract covering a period between 15 to 30 years.
- (iii) In case the fuel is to be supplied by a public sector organization (PSO), the performance of the fuel supplier (mostly PSO) will be guaranteed by the government under the terms of Fuel Supply Agreement.
- (iv) The government also provides protection against changes in certain taxes and duties and ensures the convertibility of foreign exchange to cover the necessary expenses of the project.
- (v) There are exemptions from import duties and sales taxes on plant and equipment.
- (vi) Participation of local partners to set up power projects is not mandatory.
- (vii) The bulk power tariff rate will be 6.5 cents per kWh for the first 10 years and the legalized tariff for the life of the project is 5.9 cents per kWh.
- (viii) The government has established a Private Sector Energy Development Fund with the assistance of the World Bank, USAID, and other multilateral lending agencies to provide up to 40% of the capital costs of the project, which is allowed to issue bonds and shares at discounted prices.

- (ix) The dollar indexed tariff structure is divided into two components, namely, the capacity price (fixed costs of debt servicing, returns to equity, maintenance, insurance, and administrative costs) and the energy price.
- (x) Repatriation of equity along with dividends is allowed freely.
- (xi) Foreign exchange risk insurance is available from the State Bank of Pakistan on foreign currency loans.

The international response to Pakistan's new private power policy has been almost overwhelming. The government has attracted 34 letters of support totaling 8306 MW of independent power producers (IPPs) (see Table 12), and nearly 19 have so far reached actual financial close. It was expected that nearly 3000 MW of additional capacity would be added with an investment of roughly \$3 billion. With additional supply of private power, the revised demand–supply gap under two alternative scenarios for the period up to year 2000 is reported in Table 13. Additional supplies would come from two sources, namely, captive power and private power.³¹ The demand–supply gap under Reference Forecast (Gap I), indicates a surplus of 679 MW in 1997 as some 3111 MW (237 MW from captive power and 2874 MW from private power) is expected to be on line. Thus, an addition of 2800 MW of derated capacity is likely to increase the total supply to 12434 MW by 1997 resulting into a surplus of 679 MW. But this surplus was expected to quickly turn into a shortage, rising up to 1589 MW by the year 2000.

TABLE 12
General Status of the IPP Projects

Company Name	Est. Date of Commission	Capacity Net (MW)	Letters of Support Issued	Financial Close (FC) Achieved	Date at which FC Achieved	
AES I Lal Pir	06 Nov 1997	337	✓	✓	22 May 1995	
AES II Pak Gen	01 Dec 1997	337	✓	✓	05 Jan 1995	
Altern Energy	30 May 1996	13	✓	✓	02 Jul 1996	
Biwater Hydro Power	30 Jun 1998	14	✓	×		
Consolidated Electric Power Asia	31 Jan 2000	1425	✓	×		
Davis Energen (Pvt) Ltd.	28 Feb 1997	9.8	✓	✓	14 Feb 1996	
Eeshatech Islamabad (Pvt) Ltd.	31 Mar 1996	18	✓	✓	16 Oct 1996	
ENRON Development Corporation	30 Jun 1998	782	✓	×		
Fauji Kabirwala Power	30 Sep 1997	144	✓	✓	02 Jun 1996	
FEPCO Power	30 Nov 1997	350	✓	×		
Gul Ahmed Energy Ltd.	01 Jun 1997	125	✓	✓	30 Sep 1995	
Habibullah Energy Ltd.	31 Dec 1997	123	✓	✓	04 Apr 1996	
Hisar Corporation (Pvt) Ltd.	01 Nov 1997	9	✓	×		
Japan Power Project	01 Feb 1997	107	✓	✓	24 Jan 1996	
Jaya Holdings Ltd.	31 Dec 1995	134	✓	×		

Continued next page

 $^{^{31}}$ Captive power refers to energy generating units operated by industrial units for their own consumption.

TABLE 12 (cont'd.)

Company Name	Est. Date of Commission	Capacity Net (MW)	Letters of Support Issued	Financial Close (FC) Achieved	Date at which FC Achieved	
Kohinoor Electric Co.	31 Jan 1997	120	✓	✓	13 Jun 1995	
Liberty Power Project	30 Jul 1997	212	✓	✓	21 Jul 1996	
MK Power Consortium	31 Aug 1997	10	✓	×		
Multan Power Generation Ltd.	01 Jan 1997	119.5	✓	×		
Northern Electric Co. Ltd.	14 Aug 1996	6	✓	×		
Power Generation System Ltd.	30 Nov 1997	110	✓	✓	25 Sep 1995	
Rouch (Pakistan) Power Ltd.	30 Nov 1997	358	✓	✓	07 Apr 1996	
Rupali Power Ltd.	31 Jul 1998	450	✓	×		
Saba Power Project	30 Sep 1997	104	✓	✓	03 Apr 1996	
Sabah Shipyard Project	31 Dec 1995	273	✓	✓	26 Mar 1996	
Security Electric Power Co. Ltd.	31 Dec 1996	310	✓	×		
Southern Electric Ltd.	31 Oct 1997	112	✓	✓	25 Oct 1995	
Spencer Generation Ltd.	31 Dec 1995	330	✓	×		
Star/ABB Project	31 Dec 1997	196	✓	×		
Tapal Power Project	01 Aug 1996	119.5	✓	✓	11 Mar 1996	
Tractabel Khaleej Power Ltd.	01 Mar 1998	463	✓	×		
Tri-Star Energy Ltd	01 Sep 1996	110	✓	×		
Uch Power Ltd. 31 Dec 1997		525	✓	✓	24 May 1996	
Wak Orient & Light Ltd.	Wak Orient & Light Ltd. 01 Jan 1998		✓	✓	22 Aug 1996	
Total (MW)		8306	8306	3597	-	

Source: The Government of Pakistan, Islamabad.

TABLE 13
Revised Projections of Demand-Supply Gap after the 1994 Power Policy

			Supply without	Additional Supply			Total Commiss		
Year	Demand I	Demand II	Private Power	Captive Power	Private Power	Derated Capacity	Total Supply with Private Power	GAP I	GAP II
1995	9930	9754	9225	150	_	135	9360	(570)	(394)
1996	10804	10371	9634	237	150	348	9982	(822)	348
1997	11755	11028	9634	237	2874	2800	12434	679	1406
1998	12789	11747	9634	237	3000	2913	12547	(242)	800
1999	13915	12681	9794	237	3000	2913	12707	(1208)	26
2000	15139	13628	10637	237	3000	2913	13550	(1589)	(78)

Notes: Figures in parenthesis denote power shortages. Demand I represents demand under Reference Forecast and Demand II represents demand under NPP Base Forecast. Gap I represents the demand-supply gap under Reference Forecast, while Gap II represents the demand-supply gap under NPP Base Forecast.

However, under the NPP Base Forecast, the demand-supply gap (Gap II) presents a different picture. It suggests a surplus of 1406 MW in 1997 but this surplus gradually declines and finally turns into shortage by the year 2000.

Having attracted this magnitude of investment, it can be argued even at this early stage that the power initiative has been successful in meeting its goals. However, the power policy has also invited considerable criticism. The generosity of the policy, the resultant cost the consumer will have to bear, and its impact on the country's balance of payments have been singled out for severe criticism. Another major concern was that if the projects issued letters of support under the policy that came through, it could result in system overcapacity and the scheduled payments to the private power companies would threaten the liquidity position of both WAPDA and KESC.

Realizing the fact that the government issued too many letters of support, the new power policy came under review by the government. On 3 March 1996 the Economic Coordination Committee of the Cabinet set a 3000 MW limit for private power projects, including those for which letters of support had already been issued. It was a retreat to the 1994 power policy. However, WAPDA and KESC could not afford the purchase of the supply of IPPs due to their poor liquidity position and depressed demand for electricity under economic stagnation.

E. Balance of Payments Implications

One of the central criticisms concerning the new power policy has been the issuance of far too many letters of support for private power projects and the resultant recurring annual foreign exchange cost to cover fixed and variable foreign currency expenses. Such a recurring nature of foreign exchange cost will have serious implications for the country's balance of payments. The key cash outflows in terms of foreign exchange are debt repayments, dividend payments, and fuel payments. Table 14 contains the estimated impact on the country's balance of payments. Pakistan is likely to experience a recurring foreign currency liability of \$900 million to close to \$1.0 billion per annum over the next 14 years. If 1292 MW of Hub Power Company is also taken into account, then the recurring foreign currency liability increases to \$1.3-1.4 billion per annum. These estimated balance of payments implications are very close to the ones estimated by Citibank (1996), ABN AMRO Bank (1996) and Naqvi (1996). The amount is significant in view of the country's present level of foreign exchange reserves of \$1.2-1.3 billion.

TABLE 14
Estimated Impact on the Balance of Payments
(million US\$)

Year	Debt Payments	Dividend Payments	Fuel Payments	Total BOP Impact
1996/97	360	0	122.5	482.5
1997/98	360	108	260.2	728.2
1998/99	530	108	328.4	966.4
1999/2000	500	108	344.9	952.9

Continued next page

TABLE 14 (cont'd.)

Year	Debt Payments	Dividend Payments	Fuel Payments	Total BOP Impact
2000/2001	470	108	362.0	940.0
2001/2002	440	108	380.0	928.0
2002/2003	410	108	399.0	917.0
2003/2004	380	108	419.0	907.0
2004/2005	350	108	440.0	898.0
2005/2006	320	108	462.0	890.0
2006/2007	290	108	485.0	883.0
2007/2008	260	108	510.0	878.0
2008/2009	230	108	535.0	873.0
2009/2010	200	108	562.0	870.0

Note: The following information was used in calculation:

- i. 80:20 debt-equity ratio
- ii. For 100 MV capital cost is \$100 million
- iii. 3000 MW power project is assumed
- iv. 18% return on equity
- v. 15% interest on loan
- vi. 2 years grace period and 12 years repayment period
- vii. Fuel cost is \$ 100 per ton in 1996/97
- viii. Fuel cost is assumed to grow by 5% p.a.

V. Conclusions, Lessons, and Policy Challenges

A. Conclusions and Lessons Learned

Foreign direct investment is now perceived in many developing countries as a key source of much needed capital, foreign advanced technology, and managerial skills. Realizing its central importance to economic development, these developing countries have taken wide-ranging steps to liberalize their inward FDI regime and have succeeded in attracting substantial amount of FDI. Within a span of seven years (1990-1997), the inflow of FDI rose from \$34 billion to \$150 billion, accounting for 37% of world FDI. Before the financial crisis, the Asian countries emerged as the largest FDI recipients with an estimated \$87 billion of inflows in 1997, with East and Southeast Asian countries accounting for more than 90 percent. South Asian countries, however, lagged behind considerably compared with their other fellow Asian countries. Pakistan stands nowhere close to many other Asian countries in attracting FDI.

Another major problem facing Pakistan is massive FDI on the power sector following the 1994 power policy. It has invited considerable criticism based on its serious balance of payments implications. The new power policy has resulted in an overcapacity in the power sector under subsequent industrial stagnation. Massive inflows of FDI also gave rise to a huge amount of recurring foreign exchange cost to cover fixed and variable foreign currency expenses. Further, it involves the problem of large cash outflows by IPPs for debt repayments, dividend payments, and fuel payments. With terms and conditions stated in the power policy and the various assumptions made in calculating the balance of payments implications, Pakistan is likely to experience a recurring foreign currency liability of \$900

million minimum to \$1.4 billion maximum per annum over the next 14 years.³² This is a large amount given Pakistan's foreign exchange reserves of \$1.2-1.3 billion at present. Important policy lessons can be drawn from Pakistan's experience for other developing countries. First, FDI is not necessarily beneficial to developing countries in the short term if an improper FDI policy is implemented. Second, developing economies should accord their short-term priority to inviting FDI to the foreign-exchange-earning sector, or at least, both the foreign-exchange-earning sector and other sectors simultaneously. International development organizations, including the Asian Development Bank, must consider this need in their operations particularly build-own-transfer type operations that involve the participation of foreign private investors.

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B. Policy Recommendations

(i) General Recommendations

First of all, Pakistan should make stronger efforts to attract as much FDI as possible to the foreign exchange sectors in the short term. Taking into account unfavorable balance of payments prospects, it should refrain from attracting any further massive FDI in the nonforeign-exchange-earning sectors for some years in the future. Political stability and satisfactory law and order are likewise critical to attract FDI.

The international press and media coverage Pakistan has received in recent years is not at all conducive to attracting foreign investors. News items on Pakistan being one of the most corrupt countries in the world, its bomb detonations, and its use of child labor will hardly encourage foreign investors to undertake initiatives in Pakistan. The country's political leadership must take practical steps to improve the law and order situation particularly in the major "growth poles" of the country including Karachi. Macroeconomic stability plays a key role in boosting economic growth (see Kim 1993) and restoring foreign investors' confidence on the economy. In an environment of large fiscal deficit and precarious foreign exchange reserves position, foreign investors are unlikely to increase their participation. Pakistan's fiscal situation and foreign exchange reserves position will remain under considerable strain for some time making the macroeconomic environment less conducive for foreign investors. Some drastic and far-reaching measures are needed to reduce the fiscal deficit on the one hand and raise foreign exchange reserves on the other. Inconsistent economic policies discourage foreign investors in undertaking projects of medium to long-run duration. Several recent examples of inconsistent economic policies pursued by Pakistan have sent wrong signals to foreign investors.

There is a strong perception among foreign investors that the probusiness policies and inducements used to attract prospective new investors are somehow lost in the reality they encounter when they actually begin to set up and operate their business in Pakistan. Although the investment approval requirement has been removed, numerous permits and clearances from different government agencies at national, regional, and local levels are still

 $^{^{32}}$ To mitigate this problem, the GOP has recently revised its contracts with IPPs in order to reduce the price to purchase the electricity supply of IPPs, which has caused serious international criticism, undermined investors' confidence, and resulted in many legal conflicts between the GOP and IPPs. The GOP has also made an attempt, with the assistance of the Bank, to export electricity to India but it has not been successful until now.

applied to foreign investors, causing delays to complete the process. The authorities should streamline administrative procedures regarding approval and official clearances. Foreign investors in Pakistan have to cope with a complex legal situation. Law based on different legal systems are applied independently and it is often not obvious which one will take precedence. The legal situation is even further complicated by the fact that government agencies are empowered to introduce certain changes through administrative orders and SROs. The laws and regulations should be simplified, updated, modernized, made more transparent, and their discretionary application must be discouraged.

(ii) Specific Recommendations

Taxes

Payment of taxes and contributions in Pakistan is complex and cumbersome. In addition to corporate income taxes, a large number of indirect taxes are levied at the federal, provincial, and local levels. Essentially, separate collection of taxes and contributions have forced enterprises to face unnecessary, cumbersome, and costly administrative procedures, and to deal with a large number of collecting agencies at all three levels of government. There is an urgent need to reduce the number of taxes and contributions; streamline tax regulations and administrative procedures; and most importantly reduce the contact of foreign firms with a large number of tax and contributions-collecting agencies. The existence of such a large number of taxes and collecting agencies may breed corruption, which adds to the cost of production. Import tariffs on plant and machinery have discouraged investment, more so in Pakistan where capital is scarce and cost of borrowing is high. Because of this high cost, manufacturers are discouraged to modernize and the quality of local industry products are restricted against international competition. There is a need to examine tariffs of plant and machinery with a view to substantially reducing them.

Credit Facilities

Foreign firms operating in Pakistan are currently facing cash flow problems as a result of many taxes and the Asian crisis. That these firms cannot borrow more than their equity capital have further aggravated the cash flow problem. There is a need to review this policy.

Anti-monopoly Restrictions

The existing monopoly control laws that benchmark the concentration of economic power to an unrealistically low limit of Rs 300 million for assets discourage capital formation. The monopoly control authority must review the limit in consultation with the Overseas Investors Chamber of Commerce and Industry in Pakistan.

Labor Laws

Overprotective labor laws do not encourage productivity and frighten away much needed productive investment. There is a need to rationalize the labor laws and multiple levies on employment that inhibit business expansion and job creation.

Infrastructure

The availability of better quality and more reliable services in all areas of infrastructure are key ingredients of a business environment conducive to foreign investment. In most infrastructure services, Pakistan is highly deficient as compared with many developing countries that have attracted higher levels of foreign investment. If Pakistan wants to catch up gradually with the development of the economies of East and Southeast Asia, it will have to investment more in the areas of education and physical infrastructure. On the education front, the government should identify the nature of skills critical to sustained industrial growth, and formulate strategies, policies, and programs that could facilitate the enhancement of these skills.

In telecoms, the government should expedite the privatization of PTC. In the railway and road sector, government must engage the private sector in leases, concessions, and build-operate-transfer (BOT) type contracts. The high cargo handling costs at the Karachi port need to be controlled. Dredging of shipping channels to accommodate large vessels, lowering labor costs, upgrading port handling equipment, and improving documentary procedures need urgent attention.

Confidence-building Measure

The close partnership between the private and public sector is essential to build confidence. In this respect, it is recommended that a forum be established where the private and public sectors could sit together to discuss business promotion-related issues. The forum must be composed of the prime minister, all the presidents of the national chambers, top businessmen/industrialists, top bankers, as well as heads of overseas chambers of commerce and relevant ministries' secretaries and ministers. The forum may meet regularly to review the economic situation of the country. The problem faced by the business community can be discussed and decisions could be taken immediately. This kind of partnership between the government and private sector will help restore market confidence.

APPENDIX International Flows of Foreign Direct Investment—A Comparison¹ (billion \$)

	1990	1992	1994	1995	1996	1997
Total Inflows ²	204.2	175.8	243.0	331.2	334.6	400.5
	(100.0)	(100.0)	(1000.0)	(100.0)	(100.0)	(100.0)
Developed Countries	170.3	120.3	141.5	211.5	195.4	233.1
-	(83.3)	(68.4)	(58.2)	(63.9)	(59.9)	(58.2)
Developing Countries	33.7	51.1	95.6	105.5	129.8	148.9
. 0	(16.5)	(29.1)	(29.3)	(31.9)	(38.4)	(37.2)
Asia	22.1	29.7	60.7	67.4	80.0	86.9
	(10.8)	(16.9)	(25.0)	(20.4)	(23.7)	(21.7)
PRC	3.5	11.2	33.8	35.8	40.8	45.3
	(1.7)	(6.4)	(13.9)	(10.8)	(12.1)	(11.3)
South Asia	0.46	0.62	1.23	2.73	3.29	4.35
	(0.2)	(0.4)	(0.5)	(0.8)	(1.0)	(1.1)
Pakistan	0.24	0.34	0.42	0.72	0.77	0.8
	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)

¹Figures in parentheses are the shares in total. ²Total inflows are not necessarily equal to the sum of developed and developing countries due to errors and omissions. Source: UNCTAD (1998).

References

- ABN AMRO Bank, 1996. "Private Power in Pakistan." Economic Bulletin 2(9).
- Ansari, A. H., 1996. "Privatization of Power Sector and Regulatory Mechanism." Karachi Electric Supply Corporation, Karachi.
- Board of Investment, 1995a. A Guide to Investment in Pakistan. Islamabad: Prime Minister's Secretariat, Government of Pakistan.
- ______, 1995b. Why Invest in Pakistan? Islamabad: Prime Minister's Secretariat, Government of Pakistan.
- Borensztein, E., J. De Gregorio, and J.W. Lee, 1995. How Does Foreign Direct Investment Affect Growth. NBER Working Paper No.5057, Washington, D.C.
- Chen, E. K.Y., 1992. "Changing Pattern of Financial Flows in the Asia-Pacific Region and Policy Responses." *Asian Development Review* 10(2):46-85.
- Citibank N.A., 1996. "Private Power Projects (Pakistan)." Citibank, Karachi.
- ESCAP, 1995. Sectoral Flows of Foreign Direct Investment in Asia and the Pacific. New York: United Nations.
- Esfahani, H. S., 1995. "Institutions, Private Sector Participation, and Infrastructure Development in Pakistan." Background Paper for Pakistan 2010 Project, The World Bank, Washington, D.C.
- Fry, M. J., 1996. "Foreign Direct Investment in the Pacific Basin." Paper presented at the 20th ACAES Conference on Asian Economies, Kuala Lumpur, 14-17 May.
- Government of Pakistan, 1989. Industrial Policy Package. Islamabad: Ministry of Industries.
- _______, 1994. Policy Framework and Package of Incentives for Private Sector Power Generation Projects in Pakistan. Islamabad: Ministry of Industries.
- Graham, E. M., and N. T. Anzai, 1994. "The Myth of a De Facto Asian Economic Bloc: Japan's Foreign Direct Investment in East Asia." *The Columbia Journal of World Business* 29(3):6-20.
- Graham, E. M., and P. R. Krugman, 1993. "The Surge in Foreign Direct Investment in the 1980s." In K. A. Froot, ed., *Foreign Direct Investment*. Chicago: University of Chicago Press.
- Hill, H., 1990. "Foreign Direct Investment and East Asian Economic Development." *Asian-Pacific Economic Literature* 4(2):21-58.
- Hummels, D. L., and R. M. Stern, 1994. "Evolving Patterns of North American Merchandise Trade and Foreign Direct Investment 1960-1990." World Economy 17(1):5-29.
- IFC, 1996. Lessons of Experience: Financing Private Infrastructure. Washington, D.C.: International Finance Corporation.
- Kemal, A. R., and T. Shabbir, 1995. "Infrastructure and Private Sector Development in Pakistan." In S. Ahmed and R. Hafeez, eds., *Private Sector Development in Pakistan*. Lahore: Maktaba Jadeed Press.
- Khan, A. H., 1996. "Trade Strategies in the Post-Uruguay Round Trading Environment: The Case of Pakistan." In *Expansion of Trading Opportunities to the Year 2000 for Asia-Pacific Developing Countries: Implications of the Uruguay Round and Adaptation of Export Strategies.* New York: United Nations Conference on Trade and Development.
- Khan, M. Z., 1996. "Pakistan: Prospects for Private Capital Flows and Financial Sector Development." Paper presented at the 12th Annual General Meeting of the Pakistan Society of Development Economists, Islamabad, 14-16 December.
- Kim, Y. H., 1993. Medium-term Growth-Stabilization Relationship in Asian Developing Countries and Some Policy Considerations. EDRC Report Series No. 57, Asian Development Bank, Manila.
- Lipsey, R. E., and M. Y. Weiss, 1981. "Foreign Production and Exports in Manufacturing Industries." *Review of Economics and Statistics* 63(4):488-94.
- ______, 1984. "Foreign Production and Exports of Individual Firms." Review of Economics and Statistics 66(2):304-8.

- Manzoor, A., 1996. The Power Industry. Lahore: ABN AMRO Bank.
- MIGA, 1994. Annual Report. Multilateral Investment Guarantee Agency, Washington, D.C.
- Naseem, S. M., 1981. *Underdevelopment, Poverty and Inequality in Pakistan.* Lahore: Vanguard Publication.
- Naqvi, A., 1996. "Private Power Sector." Taurus Securities Limited, Karachi.
- Naujoks, P., and K. D. Schmidt, 1995. Foreign Direct Investment and Trade in Transition Countries: Tracing Links—A Sequel. Working Paper No.704, Kiel Institute of World Economics.
- Shirouzu, H., 1993. "Observations on General Economic Situation of Pakistan Relating to Investment Climate." The Federation of Pakistan Chambers of Commerce and Industry, Karachi.
- State Bank of Pakistan, various years. Foreign Liabilities and Assets and Foreign Investment in Pakistan.
- Stone, A., 1995. "The Climate for Power Sector Development in Pakistan: Results of an Enterprise Survey." The World Bank, Washington, D.C.
- UNCTAD, 1985. "Trends and Issues in Foreign Direct Investment Related Flows. New York: United Nations Conference on Trade and Development.
- _____, various years. World Investment Report. New York: United Nations.
- Wells, L. T., 1993. "Mobile Exporters: New Foreign Investors in East Asia." In K. A. Froot, ed., *Foreign Direct Investment*. Chicago: University of Chicago Press.
- World Bank, various years. World Development Report. Washington, D.C..
- WTO, 1996. Annual Report 1996, Vol. 1. Geneva: World Trade Organization.

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